

Claims

What is claimed is:

1. Genes for diagnosing colorectal cancer, the gene sequences searching comprising the steps of:

- (1) deriving epithelium cells from normal intestines, polypus of intestines and colorectal cancer tissue;
- (2) collecting genes with highly differential gene expression by Suppression Subtractive Hybridization (SSH), and building library ;
- (3) deriving colonies with relatively high signal intensities from cancer tissue;
- (4) collecting more clinically cancer tissues by Northern Hybridization, real-time Polymerase Chain Reaction (PCR) combined with analysis of bioinformation to affirm variation between differential gene expression; and
- (5) selecting the most suitable genes from said library.

2. Genes for diagnosing colorectal cancer, the gene sequences are selected from the group consisting of:

- (1) A gene sequence as set forth in HS ID: Hs.107213
and Acc No.: BC027178;
- (2) A gene sequence as set forth in HS ID: Hs.123107 and
Acc No.:NM_002257;
- 3 A gene sequence as set forth in HS ID: Hs.1369 and Acc
No.: NM_000574 ;
- 4 A gene sequence as set forth in HS ID: Hs.151254 and
Acc No.: NM_005046 ;
- 5 A gene sequence as set forth in HS ID: Hs.1526 and Acc
No.: NM_001681 ;
- 6 A gene sequence as set forth in HS ID: Hs.184270 and
Acc No.: NM_006135 ;
- 7 A gene sequence as set forth in HS ID: Hs.2043 and Acc
No.: NM_001151 ;
- 8 A gene sequence as set forth in HS ID: Hs.267871 and
Acc No.: NM_005177 ;
- 9 A gene sequence as set forth in HS ID: Hs.4935 and Acc
No.: D79998 ;

- 10 A gene sequence as set forth in HS ID: Hs.5509 and
Acc No.: NM_006495 ;
- 11 A gene sequence as set forth in HS ID: Hs.5662 and
Acc No.: NM_006098 ;
- 12 A gene sequence as set forth in HS ID: Hs.75990 and
Acc No.: NM_005143 ;
- 13 A gene sequence as set forth in HS ID: Hs.83384 and
Acc No.: NM_006272 ;
- 14 A gene sequence as set forth in HS ID: Hs.10029and
Acc No.: NM_001814 ;
- 15 A gene sequence as set forth in HS ID: Hs.103982 and
Acc No.: NM_005409;
- 16 A gene sequence as set forth in HS ID: Hs.12314 and
Acc No.: AL049397;
- 17 A gene sequence as set forth in HS ID: Hs.150557 and
Acc No.: NM_001206 ;
- 18 A gene sequence as set forth in HS ID: Hs.169266 and
Acc No.: NM_000909;

- 19 A gene sequence as set forth in HS ID: Hs.1827 and Acc No.: NM_002507;
- 20 A gene sequence as set forth in HS ID: Hs.1869 and Acc No.: NM_002633;
- 21 A gene sequence as set forth in HS ID: Hs.194148 and Acc No.: NM_005433 ;
- 22 A gene sequence as set forth in HS ID: Hs.2352 and Acc No.: X74210;
- 23 A gene sequence as set forth in HS ID: Hs.246885 and Acc No.: NM_017958;
- 24 A gene sequence as set forth in HS ID: Hs.29665 and Acc No.: NM_014944 ;
- 25 A gene sequence as set forth in HS ID: Hs.3235 and Acc No.: NM_002272 ;
- 26 A gene sequence as set forth in HS ID: Hs.55209 and Acc No.: AF327354 ;
- 27 A gene sequence as set forth in HS ID: Hs.585 and Acc No.: NM_000384 ;

- 28 A gene sequence as set forth in HS ID: Hs.62187 and
Acc No.: AF022913 ;
- 29 A gene sequence as set forth in HS ID: Hs.63290 and
Acc No.: NM_012260 ;
- 30 A gene sequence as set forth in HS ID: Hs.699 and Acc
No.: NM_000942 ;
- 31 A gene sequence as set forth in HS ID: Hs.74111 and
Acc No.: NM_007367 ;
- 32 A gene sequence as set forth in HS ID: Hs.75103 and
Acc No.: NM_003406 ;
- 33 A gene sequence as set forth in HS ID: Hs.75117 and
Acc No.: NM_004515 ;
- 34 A gene sequence as set forth in HS ID: Hs.75236 and
Acc No.: NM_021952 ;
- 35 A gene sequence as set forth in HS ID: Hs.75258 and
Acc No.: NM_004893 ;
- 36 A gene sequence as set forth in HS ID: Hs.75498 and
Acc No.: NM_004591 ;

- 37 A gene sequence as set forth in HS ID: Hs.76913 and
Acc No.: NM_002790 ;
- 38 A gene sequence as set forth in HS ID: Hs.79889 and
Acc No.: NM_012329;
- 39 A gene sequence as set forth in HS ID: Hs.82173and
Acc No.: NM_005655 ;
- 40 A gene sequence as set forth in HS ID: Hs.84072 and
Acc No.: NM_004616 ;
- 41 A gene sequence as set forth in HS ID: Hs.85146 and
Acc No.: NM_005239;
- 42 A gene sequence as set forth in HS ID: Hs.85844and
Acc No.: NM_002529 ;
- 43 A gene sequence as set forth in HS ID: Hs.88219 and
Acc No.: NM_003454 ;
- 44 A gene sequence as set forth in HS ID: Hs.88219 and
Acc No.: NM_006350;
- 45 A gene sequence as set forth in HS ID: Hs.169319 and
Acc No.: NM_003419;

- 46 A gene sequence as set forth in HS ID: Hs.72805 and
Acc No.: NM_030921;
- 47 A gene sequence as set forth in HS ID: Hs.108301 and
Acc No.: NM_003297;
- 48 A gene sequence as set forth in HS ID: Hs.177926and
Acc No.: NM_030941;
- 49 A gene sequence as set forth in HS ID: Hs.194746and
Acc No.: NM_018896;
- 50 A gene sequence as set forth in HS ID: Hs.209061and
Acc No.: NM_003831;
- 51 A gene sequence as set forth in HS ID: Hs.25087 and
Acc No.: NM_006070;
- 52 A gene sequence as set forth in HS ID: Hs.3017 and
Acc No.: NM_003284;
- 53 A gene sequence as set forth in HS ID: Hs.283664 and
Acc No.: NM_032466;
- 54 A gene sequence as set forth in HS ID: Hs.283664 and
Acc No.: NM_032467;

- 55 A gene sequence as set forth in HS ID: Hs.171992and
Acc No.: NM_002843;
- 56 A gene sequence as set forth in HS ID: Hs.155172 and
Acc No.: NM_003664;
- 57 A gene sequence as set forth in HS ID: Hs.183418and
Acc No.: M37712;
- 58 A gene sequence as set forth in HS ID: Hs.244473 and
Acc No.: NM_031900;
- 59 A gene sequence as set forth in HS ID: Hs.12835 and
Acc No.: NM_004842 ;
- 60 A gene sequence as set forth in HS ID: Hs.1650 and
Acc No.: NM_000111 ;
- 61 A gene sequence as set forth in HS ID: Hs.29981 and
Acc No.: NM_000112 ;
- 62 A gene sequence as set forth in HS ID: Hs.2246 and
Acc No.: NM_001308 ;
- 63 A gene sequence as set forth in HS ID: Hs.267871 and
Acc No.: NM_005177;

- 64 A gene sequence as set forth in HS ID: Hs.75445 and
Acc No.: NM_004684;
- 65 A gene sequence as set forth in HS ID: Hs.39957 and
Acc No.: NM_016445;
- 66 A gene sequence as set forth in HS ID: Hs.65029 and
Acc No.: NM_002048;
- 67 A gene sequence as set forth in HS ID: Hs.239926 and
Acc No.: NM_006745;
- 68 A gene sequence as set forth in HS ID: Hs.59271 and
Acc No.: NM_006758;
- 69 A gene sequence as set forth in HS ID: Hs.8867 and
Acc No.: NM_001554;
- 70 A gene sequence as set forth in HS ID: Hs.50123 and
Acc No.: NM_003452; and
- 71 A gene sequence as set forth in HS ID: Hs.82071 and
Acc No.: NM_006079.

3. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a testing reagent for detecting colorectal cancer.

4. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a testing biochip for detecting colorectal cancer.

5. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a medicine for detecting colorectal cancer.

6. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a protein testing reagent for detecting colorectal cancer.

7. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a protein for curing medicine of colorectal cancer.

8. The genes for diagnosing colorectal cancer according to claim 2, wherein said gene sequences are to a vaccine for detecting colorectal cancer.

9. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.107213 and Acc No.: BC027178.

10. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.123107 and Acc No.: NM_002257.

11. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.1369 and Acc No.: NM_000574.

12. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.151254 and Acc No.: NM_005046.

13. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.1526 and Acc No.: NM_001681.

14. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.184270 and Acc No.: NM_006135.

15. Genes for diagnosing colorectal cancer, a gene sequence as set

forth in HS ID: Hs.2043 and Acc No.: NM_001151.

16. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.267871 and Acc No.: NM_005177.

17. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.4935 and Acc No.: D79998.

18. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.5509 and Acc No.: NM_006495.

19. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.5662 and Acc No.: NM_006098.

20. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75990 and Acc No.: NM_005143.

21. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.83384 and Acc No.: NM_006272.

22. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.10029 and Acc No.: NM_001814.

23. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.103982 and Acc No.: NM_005409.

24. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.12314 and Acc No.: AL049397.

25. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.150557 and Acc No.: NM_001206.

26. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.169266 and Acc No.: NM_000909.

27. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.1827 and Acc No.: NM_002507.

28. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.1869 and Acc No.: NM_002633.

29. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.194148 and Acc No.: NM_005433.

30. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.2352 and Acc No.: X74210.

31. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.246885 and Acc No.: NM_017958.

32. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.29665 and Acc No. NM_014944.

33. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.3235 and Acc No.: NM_002272.

34. Genes for diagnosing colorectal cancer, a gene sequence as set

forth in HS ID: Hs.55209 and Acc No.: AF327354.

35. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.585 and Acc No.: NM_000384.

36. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.62187 and Acc No.: AF022913.

37. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.63290 and Acc No.: NM_012260.

38. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.699 and Acc No.: NM_000942.

39. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.74111 and Acc No.: NM_007367.

40. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75103 and Acc No.: NM_003406.

41. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75117 and Acc No.: NM_004515.

42. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75236 and Acc No.: NM_021952.

43. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75258 and Acc No.: NM_004893.

44. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75498 and Acc No.: NM_004591.

45. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.76913 and Acc No.: NM_002790.

46. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.79889 and Acc No.: NM_012329.

47. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.82173 and Acc No.: NM_005655.

48. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.84072 and Acc No.: NM_004616.

49. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.85146 and Acc No.: NM_005239.

50. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.85844 and Acc No.: NM_002529.

51. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID Hs.88219: and Acc No.: NM_003454.

52. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID : Hs.9914 and Acc No.: NM_006350.

53. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID : Hs.169319 and Acc No.: NM_003419.

54. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.72805 and Acc No.: NM_030921.
55. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.108301 and Acc No.: NM_003297.
56. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.177926 and Acc No.: NM_030941.
57. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.194746 and Acc No.: NM_018896.
58. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.209061 and Acc No.: NM_003831.
59. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID : Hs.25087 and Acc No.: NM_006070.
60. Genes for diagnosing colorectal cancer, a gene sequence

as set forth in HS ID:Hs.3017and Acc No.:NM_003284.

61. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID Hs.283664:and Acc No.: NM_032466.

62. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID: Hs.283664 and Acc No.:NM_032467.

63. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID: Hs.171992 and Acc No: NM_002843.

64. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID: Hs.155172 and Acc No: NM_003664.

65. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID: Hs.183418 and Acc No: M37712.

66. Genes for diagnosing colorectal cancer, a gene sequence
as set forth in HS ID: Hs.244473 and Acc No: NM_031900.

67. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.12835 and Acc No: NM_004842.
68. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.1650 and Acc No: NM_000111.
69. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.29981 and Acc No.: NM_000112.
70. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.2246 and Acc No.: NM_001308.
71. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.267871 and Acc No.: NM_005177.
72. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.75445 and Acc No.: NM_004684.

73. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.39957 and Acc No.: NM_016445.

74. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.65029 and Acc No.: NM_002048.

75. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.239926 and Acc No.: NM_006745.

76. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.59271 and Acc No.: NM_006758.

77. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.8867 and Acc No.: NM_001554.

78. Genes for diagnosing colorectal cancer, a gene sequence as set forth in HS ID: Hs.50123 and Acc No.: NM_003452.

79. Genes for diagnosing colorectal cancer, a gene sequence as set

forth in HS ID: Hs.82071 and Acc No.: NM_006079.